

IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE

## PATENT APPLICATION

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CENTRAL FAX CENTER

JUN 28 2005

CASE He 1-1-4-3

Serial No. 09/772832

Group Art Unit 2642

Filed January 30, 2001

Examiner R. Al Aubaidi

Title Method, System, And Server For Providing Internet Call Waiting Service

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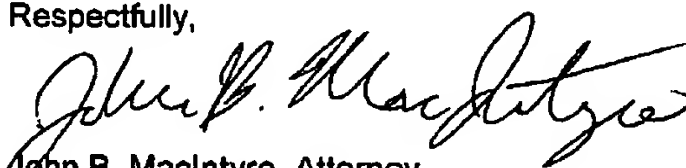
SIR:

Enclosed is an Appellants' Brief in the above-identified application.

Please charge Lucent Technologies Deposit Account No. 12-2325 in the amount of \$500.00 to cover the cost of filing the Appellants' Brief.

In the event of non-payment or improper payment of a required fee, the Commissioner is authorized to charge or to credit Deposit Account No. 12-2325 as required to correct the error.

Respectfully,

  
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Date:

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JUN 29 2005

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**JUN 28 2005**

**IN THE UNITED STATES  
PATENT AND TRADEMARK OFFICE**

**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

**Patent Application**

Inventors: He, Lun Xiong  
Leng, Bing  
Yang, ZhongJin  
Zhang, Peng

Case: 1-1-4-3

Title: Method, System, And Server For Providing Internet Call Waiting Service

Serial No.: 09/772,832

Examiner: Al Aubaidi, Rasha S

Filed: January 30, 2001

Group Art Unit: 2642

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

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**APPELLANTS' BRIEF**

**1. REAL PARTY IN INTEREST**

The real party in interest and assignee of all rights to the subject application is Lucent Technologies Inc.

**2. RELATED APPEALS AND INTERFERENCES**

There are no other appeals or interferences which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

### **3. STATUS OF CLAIMS**

Original application was filed with claims 1-29. The current status of claims is as follows:

Pending: Claims 1-29

Canceled: N/A

Claims 1-29 are the subject of this appeal.

### **4. STATUS OF AMENDMENTS**

No amendments were filed after the final rejection.

### **5. SUMMARY OF INVENTION**

Applicants' invention relates to a method, communication system, and server that facilitates internet call waiting service. The communication system includes a switch, an Internet Service Provider (ISP), and an Internet Call Waiting/Holding (ICW/H) server.

A computer initiates an internet call waiting connection with an ISP, preferably by dialing an access code, such as \*90, before the directory number of the ISP to enable the internet call waiting service.. The internet call waiting connection traverses a switch. The ISP assigns a dynamic Internet Protocol (IP) address to the computer, which is used for the internet call waiting connection. The computer sends the directory number of the phone line that the computer is utilizing and the dynamic IP address of the computer to the Internet Call Waiting/Holding (ICW/H) server.

The ICW/H server stores the directory number and the dynamic IP address of the computer and sends a message to the switch indicating that the call waiting service is active for this internet call waiting connection. The switch stores this information so that when a call request is received for the phone line to which the computer is connected, the switch will know how to direct the call. The ICW/H server is notified by the computer when the internet call waiting connection terminates, and the ICW/H server removes the IP address and directory number of the computer from its memory at this time. After the computer releases the

connection to the ISP, the switch removes the indication that an internet call waiting connection is in progress.

When the switch receives, during the internet call waiting connection, an incoming call request intended for the computer, the switch routes the incoming call request to the ICW/H server. The switch knows that the phone line connected to the computer is involved in an internet call waiting connection based upon the completion message received from the ICW/H server.

The ICW/H server, upon receiving the incoming call request from the switch, alerts the computer of the incoming call request without dropping the internet call waiting connection. This is preferably done by presenting the computer with a choice as to whether to accept the incoming call request.

If the computer accepts the incoming call request, the internet call waiting connection is maintained. The computer can switch back to the internet call waiting connection from the incoming call request. If desired, the user of the computer can accept the call and terminate the internet call waiting connection.

## **6. ISSUES**

The issues presented on appeal are whether claims 1-8, 14-24, and 26-29 are properly rejected under 35 U.S.C. 102(e) as being anticipated by Bajzath et al. (U.S. Patent Number 6,144,644), whether claims 9-12 and 25 are properly rejected under 35 U.S.C. 103(a) as being unpatentable over Bajzath et al. (U.S. Patent Number 6,144,644), and whether claim 13 is properly rejected under 35 U.S.C. 103(a) as being unpatentable over Bajzath et al. (U.S. Patent Number 6,144,644) in view of Epler et al. (U.S. Patent Number 6,026,156).

## **7. GROUPING OF CLAIMS**

Applicants do not believe that all claims stand or fall together. Claims 1-12 and 14-25 are included in the grouping of claim 1. Claims 26-29 do not stand or fall with claim 1 and are included in the grouping of claim 26. Claim 13 does not stand or fall with the previous groupings. Arguments as to why the claims are separately patentable are presented below.

## **8. ARGUMENTS**

### **Claim 1**

Applicants' invention as embodied in claim 1 of Applicants' invention relates to a method for providing call waiting service for a computer connected to an Internet Service Provider (ISP) without dropping the connection with the ISP. Claim 1 includes four steps, the last three of which are described in detail below.

*sending the directory number and a dynamic IP address of the computer to an Internet Call Waiting/Holding (ICW/H) server;*

In claim 1 of Applicants' invention, an internet call waiting connection is initiated between the computer and the ISP. The directory number and dynamic IP address of the computer is sent to an Internet Call Waiting/Holding (ICW/H) server. The ICW/H server stores the directory number and the dynamic IP address of the computer. The ICW/H server preferably sends a message to the switch indicating that the call waiting service is active.

The Bajzath reference relates to a system and method for implementing call waiting functions over a network. In the Bajzath reference, a user dials an ISP's telephone number, and the user's ten-digit telephone number is sent to Service Switching Point (SSP) 140 and then routed to Service Control Point (SCP) 145. See column 4, lines 41-46. As can be seen in FIG. 2, call waiting Internet server 215 is a distinct element from SSP 140 and SCP 145. The Bajzath reference does not teach or suggest sending the directory number of the user to call waiting Internet server 215. Conversely, the Bajzath reference sends the user's telephone number to SSP 140 and then routes the number to SCP 145. Rather, only the user's Internet protocol (IP) address is sent to call waiting Internet server 215. See column 5, lines 8-13.

The Office Action states that the user sends the telephone number to an Internet Call Waiting/Holding server. As shown above, only the IP address is sent to call waiting Internet server 215. The phone number of the user is not sent to call waiting Internet server 215 in the Bajzath reference.

In conclusion, claim 1 of Applicants' invention calls for sending the phone (directory) number of the computer to an Internet Call Waiting/Holding (ICW/H) server; the Bajzath

reference only sends the IP address of the user to call waiting Internet server 215. Since the Bajzath reference does not teach or suggest this aspect of claim 1, the Bajzath reference does not anticipate Applicants' invention as embodied in claim 1.

storing the directory number and the dynamic IP address of the computer at the ICW/H server; and

Applicants' claim 1 also calls for storing the directory number of the user at the ICW/H server. As shown above, the Bajzath reference does not teach or suggest sending the phone (directory) number of the user to call waiting Internet server 215. Since the Bajzath reference does not teach or suggest sending the directory number of the user to a server, it cannot teach or suggest storing such number. Without this teaching, it is unfair to utilize the Bajzath reference to anticipate Applicants' invention as embodied on claim 1.

sending a message from the ICW/H server to the switch indicating that the call waiting service is active.

Further, Applicants' claim 1 calls for sending a message from the ICW/H server to the switch indicating that the call waiting service is active. The Office Action points to step 340f in FIG. 3C and column 4, lines 58-64 of the Bajzath reference to show this element. Step 340f relates to sending a termination notification message from a CPR (call processing record) to a switch. In the Bajzath reference, CPRs are another name for service logic programs (SLPs). See column 4, lines 50-51. SLPs are programs that execute within SCP 145. See column 4, lines 45-47. SCP 145 is different and distinct from call waiting Internet server 215. See FIG. 2. Consequently, the Bajzath reference does not teach or suggest Applicants' step of sending a message from the ICW/H server to a switch to indicate that call waiting service is active. Conversely, the Bajzath reference shows sending a message from SCP 145 to a switch, not from an ICW/H server to the switch.

### Conclusion

In conclusion, the Bajzath reference does not anticipate claim 1 of Applicants' invention because it lacks a teaching for at least three elements of Applicants' claim 1. The Bajzath reference: 1. does not send the directory number of the user to an Internet Call Waiting/Holding

(ICW/H) server; 2. does not store the directory number of the user at the Internet Call Waiting/Holding (ICW/H) server; and 3. does not send a message from the ICW/H server to the switch indicating that the call waiting service is active. For all these reasons, the Bajzath reference does not anticipate Applicants' invention as embodied in claim 1.

### **Claim 26**

Applicants' invention as embodied in claim 26 of Applicants' invention relates to an Internet Call Waiting/Holding (ICW/H) server that includes a packet port, memory, a processor, and a circuit port. Applicants will show that the Bajzath reference does not teach or suggest Applicants' invention as embodied in claim 26 for, at the minimum, a lack of anticipation of the packet port, the memory, and the circuit port.

a packet port for receiving a directory number and a dynamic IP address of a computer, the directory number and the dynamic IP address associated with a computer for an internet call waiting connection;

In accordance with claim 26 of Applicants' invention, the packet port receives a directory number of a computer. The Office Action states that this is an inherent component of call waiting Internet server 215. Applicants respectfully disagree.

The Bajzath reference does not describe the elements comprising call waiting Internet server 215. As discussed above with regard to claim 1, the call waiting Internet server 215 of the Bajzath reference only receives the user's IP address. See column 5, lines 8-13.

In conclusion, since the call waiting Internet server 215 does not receive the directory number of a computer, it does not anticipate claim 26, and in particular does not teach or suggest a packet port for receiving a directory number.

memory for storing the directory number and the dynamic IP address of the computer;

As shown above, call waiting Internet server 215 does not receive the directory number of the user. Since the Bajzath reference does not teach or suggest receiving the directory number of the computer, the Bajzath reference cannot be fairly read to teach or suggest memory for storing the directory number of the computer.

The Office Action states that memory in claim 26 of Applicants' invention reads on the storage media diskette or CD-ROM on column 4, lines 24-38 of the Bajzath reference.

Applicants respectfully disagree. The Bajzath reference at this point relates to how a user may receive call waiting Internet application software. See column 4, lines 30-32. The Bajzath reference states that the user may receive the software by downloading from ISP 115, downloading from call waiting Internet server 215, or the software may be provided to the user on storage media, such as a diskette or CD-ROM. See column 4, lines 32-35. The sentence structure clearly indicates that the storage media is distinct from the call waiting Internet server 215. Since the storage media is distinct from call waiting Internet server 215, the storage media cannot be read on the call waiting Internet server 215 of the Bajzath reference or the memory of Applicants' claim 26.

Further, the storage media included in the Bajzath reference stores call waiting software, not the directory number of dynamic IP address of the computer, as called for in claim 26 of Applicants' invention.

In conclusion, the Bajzath reference does not teach or suggest memory within call waiting Internet server 215 that stores the phone number of the user. The Bajzath reference does not even include any indication that the call waiting Internet server 215 receives the phone number of the user, so it cannot support an argument that the call waiting Internet server 215 stores the phone number of the user.

a circuit port for sending a message to a switch indicating that call waiting service is active.

The Bajzath reference does not teach or suggest a circuit port for sending a message to a switch indicating that the call waiting service is active. The Office Action states that this is inherent in the Bajzath reference. Applicants respectfully disagree.

The circuit port of claim 26 calls for sending a message from the ICW/H server to the switch indicating that the call waiting service is active. The Bajzath reference shows sending a termination notification message from a CPR (call processing record) to a switch. In the Bajzath reference, CPRs are another name for service logic programs (SLPs). See column 4, lines 50-51. SLPs are programs that execute within SCP 145. See column 4, lines 45-47. SCP 145 is



different and distinct from call waiting Internet server 215. See FIG. 2. Consequently, the Bajzath reference does not teach or suggest the circuit port of Applicants' claim 26 that sends a message from the ICW/H server to a switch indicating that call waiting service is active. Conversely, the Bajzath reference shows sending a message from SCP 145 to a switch, not from an ICW/H server to the switch.

In conclusion, the Bajzath reference does not teach or suggest an Internet Call Waiting/Holding (ICW/H) server that includes a circuit port for sending a message to a switch indicating that call waiting service is active, but rather sends a message from SCP 145, a distinct element, to a switch.

### Conclusion

Therefore, since the Bajzath reference does not teach or suggest an ICW/H server that includes a packet port for receiving a directory number of a computer, memory for storing the directory number of the computer, or a circuit port for sending a message to a switch indicating that call waiting is active, the Bajzath reference does not anticipate Applicants' invention as set forth in claim 26.

### Claim 13

Claim 13 of Applicants' invention depends from claim 1. Claim 13 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Bajzath et al. in view of Epler. Applicants respectfully disagree.

Claim 13 states that the step of initiating an internet call waiting connection between the computer and an ISP comprises dialing an access code to enable the internet call waiting service. The Office Action states that the Bajzath reference anticipates claim 1, which Applicants have traversed above by showing that the Bajzath reference does not teach or suggest sending a directory number of a computer to a server, storing the directory number of the computer at the server, or sending a message from the server to the switch indicating that call waiting service is active. The Office Action admits that the Bajzath reference does not specifically teach the step of initiating an Internet call waiting connection by dialing an access code to enable Internet call

waiting service. The Office Action relies on the Epler reference to make up for this deficiency in the Bajzath reference.

The Epler reference relates to an enhanced call waiting system. In the Epler reference, Bob and Pat are engaged in a call. See column 6, lines 34-35. Fred tries to call Bob, but Fred gets a busy message. See column 6, lines 35-37. An Enhanced Call Waiting System 40 offers Fred the opportunity to try to connect to Bob by hitting a key, such as 1. See column 6, lines 38-48. If Fred touches 1, the Enhanced Call Waiting System 40 dials Bob's telephone number. See column 6, lines 48-52.

This is different than Applicants' invention as embodied in claim 13. Claim 13 calls for the computer to dial an access code to enable the internet call waiting service. The Epler reference relates to an Enhanced Call Waiting System that acts as a fourth party to dial a user, which is vastly different than Applicants' claim 13, which includes the computer dialing an access code to enable the internet call waiting service. In the Epler reference, it is the Enhanced Call Waiting System that dials a call waiting code, not the original call-waiting user. Therefore, the Epler reference relates to a third party joining a call in progress by pressing a key after the call has been established, while Applicants' invention as embodied in claim 13 relates to a user who initiates a call-waiting call dialing an access code during call setup.

### Conclusion

In conclusion, since claim 13 depends from claim 1, which is not anticipated by the Bajzath reference as shown above, claim 13 is in condition for allowance. Further, since the Epler reference does not teach or suggest dialing an access code to enable call waiting service, claim 13 is not anticipated by the references.

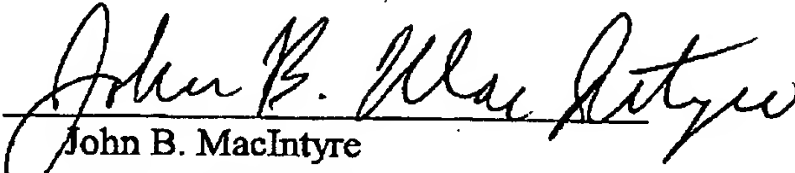
## CONCLUSION

Accordingly, Applicants believe that the application is in condition for allowance. All pending claims have been shown to be patentably distinct from the references used in the previous Office Actions. Because Applicants believe that all pending claims are patentably distinct from the references cited, Applicants believe that the rejections of claims 1-29 are not

supported. Applicants thereby respectfully request the Board reverse the rejection of each of these claims.

Respectfully,

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## **9. APPENDIX**

1. A method for providing call waiting service for a computer connected to an Internet Service Provider (ISP) without dropping the connection with the ISP, the method comprising:
  - initiating an internet call waiting connection between the computer and an ISP, the internet call waiting connection traversing a switch;
  - sending the directory number and a dynamic IP address of the computer to an Internet Call Waiting/Holding (ICW/H) server;
  - storing the directory number and the dynamic IP address of the computer at the ICW/H server; and
  - sending a message from the ICW/H server to the switch indicating that the call waiting service is active.
2. A method for providing call waiting service in accordance with claim 1, the method further comprising the steps of:
  - receiving an incoming call request intended for the computer at the switch while the internet call waiting connection is active;
  - routing the incoming call request from the switch to the ICW/H server; and
  - alerting the computer of the incoming call request without dropping the internet call waiting connection.
3. A method for providing call waiting service in accordance with claim 2, wherein the step of alerting the computer of the incoming call request is performed by the ICW/H server via the internet call waiting connection.
4. A method for providing call waiting service in accordance with claim 2, wherein step of alerting the computer of the incoming call comprises presenting the computer with a choice as to whether to accept the incoming call request.

5. A method for providing call waiting service in accordance with claim 4, further comprising step of maintaining the internet call waiting connection if the computer accepts the incoming call request.
6. A method for providing call waiting service in accordance with claim 5, further comprising the step of switching back to the internet call waiting connection after the incoming call releases.
7. A method for providing call waiting service in accordance with claim 4, the method further comprising the step of dropping the internet call waiting connection.
8. A method for providing call waiting service in accordance with claim 4, the method further comprising the step of rejecting the incoming call request.
9. A method for providing call waiting service in accordance with claim 8, wherein the step of rejecting the incoming call request comprises playing a prerecorded message.
10. A method for providing call waiting service in accordance with claim 8, wherein the step of rejecting the incoming call request comprises sending a message to the phone associated with the incoming call request.
11. A method for providing call waiting service in accordance with claim 10, wherein the message is a packet-based message.
12. A method for providing call waiting service in accordance with claim 10, further comprising the step of converting the message utilizing a text-to-speech converter.
13. A method for providing call waiting service in accordance with claim 1, wherein the step of initiating an internet call waiting connection between the computer and an ISP comprises dialing an access code to enable the internet call waiting service.

14. An internet call waiting system comprising:

a switch for receiving a request for an internet call waiting connection from a computer;  
an Internet Service Provider (ISP) coupled to the switch and providing access to the Internet, the ISP effective in assigning a dynamic Internet Protocol (IP) address to the computer for the internet call waiting connection to the internet; and

an Internet Call Waiting/Holding (ICW/H) server coupled to the switch and the ISP, the ICW/H server effective in receiving and storing the directory number and the dynamic IP address of the computer, the ICW/H server also effective in sending a message to the switch indicating that the call waiting service is active.

15. An internet call waiting system in accordance with claim 14, wherein the switch is effective in performing internet call waiting registration.

16. An internet call waiting system in accordance with claim 15, wherein the switch is effective in completing the internet call waiting registration based upon receipt of a confirmation from the ICW/H server.

17. An internet call waiting system in accordance with claim 14, wherein the switch is effective in receiving an incoming call request intended for the computer while the internet call waiting connection is active.

18. An internet call waiting system in accordance with claim 17, wherein the switch is effective in routing the incoming call request to the ICW/H server.

19. An internet call waiting system in accordance with claim 18, wherein the switch is effective in releasing the internet call waiting connection and bridging a connection between a computer and an incoming call.

20. An internet call waiting system in accordance with claim 18, wherein the switch is effective in maintaining the internet call waiting connection and bridging a connection between a computer and an incoming call.
21. An internet call waiting system in accordance with claim 20, wherein the switch is effective in releasing the connection between the computer and the incoming call and reactivating the internet call waiting connection between the computer and the ISP.
22. An internet call waiting system in accordance with claim 21, wherein the switch is effective in deactivating the internet call waiting connection.
23. An internet call waiting system in accordance with claim 18, wherein the ICW/H server is effective in receiving a message including the directory number and dynamic IP address of the computer to the ISP.
24. An internet call waiting system in accordance with claim 23, wherein the ICW/H server is effective in alerting the computer of the incoming call request without dropping the internet call waiting connection.
25. An internet call waiting system in accordance with claim 23, wherein the ICW/H server is effective in deactivating the internet call waiting connection.

26. An Internet Call Waiting/Holding (ICW/H) server comprising:

a packet port for receiving a directory number and a dynamic IP address of a computer, the directory number and the dynamic IP address associated with a computer for an internet call waiting connection;

memory for storing the directory number and the dynamic IP address of the computer;

a processor; and

a circuit port for sending a message to a switch indicating that call waiting service is active.

27. An Internet Call Waiting/Holding (ICW/H) server in accordance with claim 26, wherein the circuit port is effective in receiving an incoming call request from the switch.

28. An Internet Call Waiting/Holding (ICW/H) server in accordance with claim 27, wherein the processor is effective in sending an alerting message including the directory number of an incoming caller to the computer.

29. An Internet Call Waiting/Holding (ICW/H) server in accordance with claim 27, wherein the processor is effective in sending a message via the circuit port to the switch for instructing the switch to perform call bridging functionality.